

# Solar LED Taxiway & Runway Semiflush Reflective Markers FAA L-853 Type I, Style I

## Compliance

- ETL Certified L-853 Type I, Style I: FAA AC 150/5345-39D
  - Taxiway Centerline
  - Runway Centerline
- IP68 Ingress Protection

## Applications

Solar LED Semiflush Reflective Markers are used to delineate runways, taxiways, helipads, and roadways for visual recognition.

- Airfield lighting:
  - Taxiway centerline (green/green)\*
  - Runway centerline (white/white)\*
  - Taxiway edge (blue/blue)
  - Threshold (red/green)
  - Obstruction (red/blank)
- Helicopter landing pads
- Seaplane landing areas
- Fire hydrant indicators

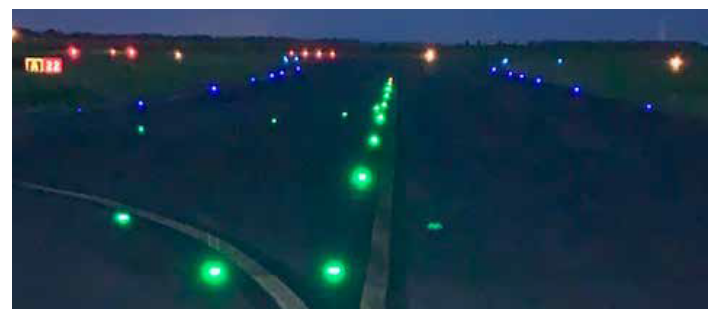
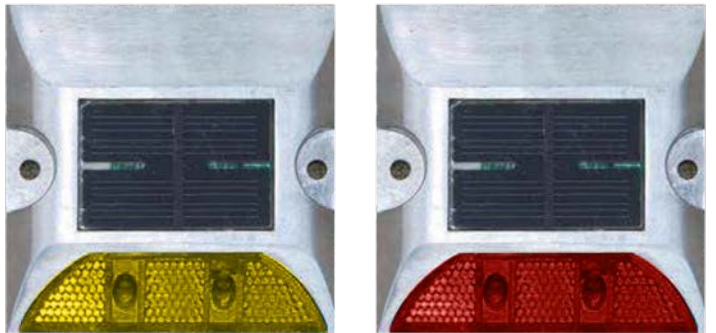
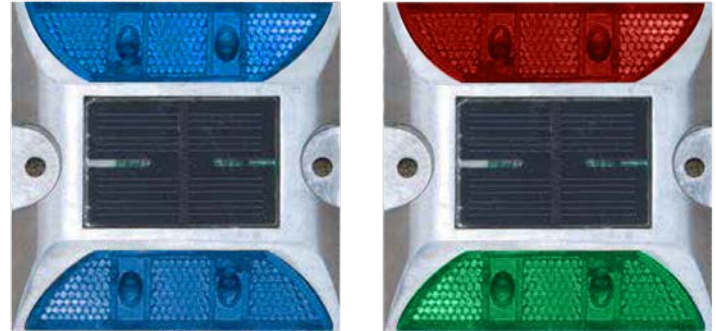
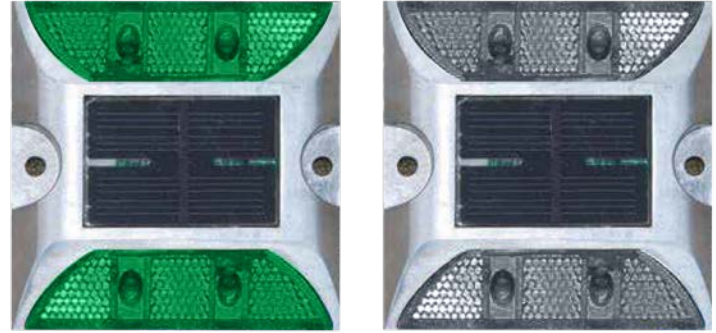
## Features

- Highly visible at night and under adverse weather conditions
- Semiflush snowplow-safe design
- Aluminum alloy fixture rated for 25 tons PSI
- High brightness LEDs (5mm diameter)
- Visible over 1/2 mile (800m) away
- Flashing or constant mode
- LEDs operate all night (dusk to dawn)
- Integrated reflective section enhances visibility
- IP68 water and dust resistant
- Maintenance free
- Designed to operate in extreme temperatures
- Easy installation with optional thermoplastic adhesive pad

## Specifications

- Battery Type: Anti-heat NiMH (2.4V/600mA)
- Operating Hours: 24 to 30 hours after fully charged
- Battery Charge Time: 4 hours of sunlight
- Battery Lifespan: 3 to 5 years
- Solar Panel: Monocrystalline (4V/63mA)
- Mounting Surfaces: Asphalt, concrete, turf, or dirt
- Fixture Dimensions: 4" x 4" x .75" (102 x 102 x 20mm)

\* Application ETL certified.





**Thermoplastic Adhesive Pad Installation Instructions**

The optional adhesive pads are a non-toxic, zero VOC, performance thermoplastic adhesive designed to adhere markers to concrete or asphalt. When heated with a propane torch, the pad liquefies and fuses the marker to the pavement surface.

**Number of Adhesive Pads per Fixture:**

- Standard project: one pad
- FAA project: two pads



**Required Equipment:**

- Propane-fueled torch (Gas Pony or equivalent) with 25 ft hose
- Adequate propane supply
- Safety glasses (or face shield), protective gloves, leather boots, long pants

**Storage and Handling:**

- Store adhesive pads indoors in a dry location at 35°F to 90°F (2°C to 32°C) and keep them dry prior to installation.
- Avoid dropping or throwing adhesive pads when ambient temperatures are below 50°F (10°C), as the material becomes less flexible and may crack.

**Surface Requirements:**

- Asphalt and concrete pavement
- Specialty paving surfaces such as brick, cobblestone, or stepping stones
- Adhesive pads may also be installed over existing adhesive pads when the surface is clean and stable.

**The pavement surface must be:**

- Free of dirt, dust, sand, debris, oils or chemical contamination
- Completely dry prior to installation. If moisture is present, the installation area must be dried using the propane torch before placing the adhesive pad.

**Propane Cylinder Safety:**

- Propane cylinders must always be operated in the upright position with the valve at the top.
- Never lay the propane cylinder on its side, as this may allow liquid propane to enter the torch, creating a hazardous condition.

**Ordering Codes**

Product Code	LED Color Combination (Side 1 / Side 2)
SL-L853T1	BB: Blue/Blue
	GG: Green/Green
	WW: White/White
	YY: Yellow/Yellow
	GY: Green/Yellow
	RG: Red/Green
	RW: Red/White
	RY: Red/Yellow
	BX: Blue/Blank
	GX: Green/Blank
	RX: Red/Blank
	WX: White/Blank
	YX: Yellow/Blank

**Installation Procedure:**

**Step 1 – Surface Preparation**

- Clean the installation area thoroughly. Remove all loose material including dust, sand, and debris.
- A power blower may be used to clear the surface. The propane torch may also be briefly used to blow debris away from the application area.

**Step 2 – Remove Surface Moisture**

- Ensure the pavement surface is completely dry. Surface moisture may not always be visible.
- Use the propane torch to heat and dry the installation area if necessary.

**Step 3 – Position Adhesive Pad**

- Set the adhesive pad in the desired location on the pavement surface.

**Step 4 – Heat Adhesive Pad**

- Stand with the wind at your back so heat is directed away from the operator.
- Using the propane torch, move the flame slowly and evenly across the adhesive pad. Continue heating until the pad becomes soft and molten, allowing it to spread slightly.
- The adhesive pad must reach its melting temperature to achieve proper bonding with the pavement surface.

**Step 5 – Install Marker**

- Immediately after the adhesive pad becomes molten, place the marker onto the adhesive using a gloved hand.
- Apply gentle pressure to seat the marker into the adhesive pad.
- Do not press the marker directly against the pavement surface. Maintain a thin layer of adhesive between the marker and the pavement.
- The molten adhesive should flow into the recessed cavities on the underside of the marker, and flow through the anchor holes on both sides of the marker. This creates a mechanical bond that secures the fixture to the pavement.

**Step 6 – Cooling**

- Allow the adhesive pad to cool and solidify. Under normal conditions, the adhesive will set within a few minutes.

